Exhibit 31

ATLANTA

Corporate Headquarters 3945 Lakefield Court Suwanee, GA 30024 (770) 866-3200 FAX (770) 866-3259



Expert Report

MDL Johnsons' Baby Powder Application and Exposure Container Calculations For Six Ovarian Cancer Victims Bellwether Cases



Prepared by:

William E. Longo, Ph.D.

Materials Analytical Services, LLC

3945 Lakefield Court

Suwanee, Georgia 30024

Table of Contents

| | Index | Page |
|----|------------------|------|
| 1. | Qualifications | 3 |
| 2. | Linda Bondurant | 6 |
| 3. | Hilary Converse | 9 |
| 4. | Anna Gallardo | 13 |
| 5. | Carter Judkins | 14 |
| 6. | Tamara Newsome | 16 |
| 7. | Pasqualina Rausa | 18 |

Qualifications

Document 33295-31

PageID: 260215

I have a Bachelor of Science degree in Microbiology, a Master of Science degree in Engineering, and a Doctorate of Philosophy in Materials Science and Engineering, from the University of Florida. My education and employment history are set forth in my Curriculum Vitae, a true and correct copy of which is attached hereto as **Exhibit A**.

I am the Chief Executive Officer at MAS, LLC ("MAS"). For more than 30 years, I have studied the content, type, and release of asbestos fibers from asbestos-containing products, including products that contain talc. MAS is accredited by the American Industrial Hygiene Association for measuring asbestos fibers by phase contrast microscopy. MAS is also certified by the International Standards Organization ("ISO") for measuring bulk samples and air samples of asbestos. To date, MAS is the only laboratory in the country accredited by the American Association for Laboratory Accreditation A2LA, on behalf of ISO, for analysis of Asbestos in Cosmetic Talc Products by Polarized Light Microscopy ("PLM") (Blount prep method using heavy liquid separation: ISO 22262-1) and Transmission Electron Microscopy ("TEM") (ISO 22262-2). MAS is also a registered Food and Drug Administration ("FDA") laboratory that is permitted to perform work for companies that want to submit MAS analysis for FDA approval.

As a materials scientist, I study the relationships among the structure, properties, synthesis, and performance of a wide range of materials. I examine why and how materials behave under various conditions, such as temperature, pressure, stress, or exposure to climatic conditions, and how materials are used in every aspect of people's lives. I have spent the last 30 years studying all aspects of asbestos analysis, including air samples' use to analyze the airborne asbestos dust generated from using asbestos-containing products. This would include the use of both midget impinger and air cassettes. Under my direction, our laboratory has analyzed approximately 400,000 bulk asbestos samples, including many thousands of air samples.

In addition to the routine analysis of air samples for asbestos content, again, under my direction, MAS has performed well over two hundred work practice simulations that involve the measurement of airborne asbestos fibers using these products' scientifically recognized methodologies. These work practices studies have been performed for both plaintiffs and defendants, including Westinghouse, Rockbestos, General Electric, Guard-Line, Carborundum, American Insulating Wire Corporation, Continental Wire Company, Tecumseh Engines and Vickers Hydraulic Pumps, Eutectic Inc., and Scotts Fertilizer Company.

At MAS, I analyze and study a wide spectrum of products and associated chemicals, including studies of various asbestos-containing products that test the potential for releasing asbestos

fibers into the air. These studies demonstrate, among other things, whether a product manufacturer could have anticipated the quantity of asbestos released into the air from its products and the levels of asbestos fibers released under certain circumstances, if any. I perform these tests under rigorously controlled laboratory conditions following the governmental standards promulgated by NIOSH and the EPA. Using a specifically designated testing room, I simulate the typical uses of asbestos-containing products, including asbestoscontaining cable hole covers, asbestos cement pipe, asbestos industrial gaskets, asbestoscontaining brakes, and asbestos-containing joint compounds. MAS utilizes multiple standardized analytical testing techniques to determine the amount of asbestos released into the air and dispersed into workers' breathing zones, clothing, and surroundings. MAS methods include testing techniques routinely employed by and available to the asbestos industry in the 1950s and 1960s and updated, standardized testing procedures.

PageID: 260216

I am a member of numerous organizations and professional groups specializing in the testing and analysis of asbestos-containing materials, including the former Environmental Protection Agency ("EPA") Peer Review Group for the Asbestos Engineering Program, the American Industrial Hygiene Association, Materials Research Society, American Society for the Testing of Materials ("ASTM"), and the American Society of Materials. I have given numerous lectures, including "Settled Dust: Asbestos and Other Particulates," "The Role of the Laboratory Manager, Quality Assurance Officer and the Analyst for NIST Accreditation," and "Fundamentals of Asbestos Analysis by TEM." Additionally, I was requested by the EPA, along with other scientists, to help develop the EPA's protocol for taking and analyzing settled asbestos dust samples. I was also responsible for writing the ASTM asbestos dust analysis standards. I have published numerous articles about the analysis and testing of asbestos-containing materials, including the quantification of asbestos particles released upon manipulation of these asbestos products in the manner performed in the work environment. My articles include the following:

- Millette, Longo, et al., Demonstration of the Capability of Asbestos Analysis by Transmission Electron Microscopy in the 1960's (1993) 41 Microscope 15;
- Ewing, Longo, et al., Asbestos Exposure During and Following Cable Installation in the Vicinity of Fireproofing (1993) 1 Environ. Choices Tech. Supp.;
- Longo, Egeland, et al., Fiber Release During the Removal of Asbestos-Containing Gaskets: A Work Practice Simulation (2002) 17 Applied Occup.

and Environ. Hygiene J. 55; and

Ewing, Longo, et al., Zonolite Attic Insulation Exposure Studies (2010) 16 Int'l J. of Occup. and Env't Health 279.

Further, my research regarding the analysis of cosmetic talc powder products, including asbestos content and releasability upon use, has been published in the peer-reviewed literature. [Steffen, et al., Serous Ovarian Cancer Caused by Exposure to Asbestos and Fibrous Talc in Cosmetic Talc Powders—A Case Series (Feb. 2020) 62 J. Occup. Environ. Med. e65.] My research and peer-reviewed publications about the analysis and testing of asbestos-containing materials, as described above, may be found in my Curriculum Vitae (Exhibit A).

My consulting extends beyond testimony for plaintiffs in asbestos cases. MAS consults with defense firms and outside the litigation context with well-known companies such as Scotts, Hitachi, Intel, BMW, Honda, Dow, and Union Carbide. MAS is a leading engineering consulting firm that provides a broad range of services, including environmental and industrial hygiene and emissions testing of construction products. MAS has performed consulting work for government agencies such as the Centers for Disease Control and the National Institutes of Health. MAS has also worked as an expert for the City of New York, State of New York, State of Hawaii, State of Texas, State of Utah, City of Los Angeles, City of Baltimore, City of Chicago, and the City of Boston in their respective litigation against asbestos companies for property damage litigation. MAS has been involved in testing asbestos-containing materials for over 30 years and has analyzed hundreds of thousands of asbestos samples.

I have been qualified many times in courts throughout the United States as an expert witness in material science, optical and electron microscopy, and industrial hygiene matters relating to asbestos issues, including cases involving talc and talc powder products. My methodology in analyzing talc and cosmetic talc powder products for the presence of asbestos was subject to a Daubert hearing in the New Jersey ovarian cancer MDL and has been found reliable.

Moreover, I have been qualified as an expert witness regarding my analysis of cosmetic talc powder products in more than 30 cases by courts across the country in 8 states. In this Court, I was qualified as an expert witness in asbestos-related industrial hygiene and as a materials scientist in a talc trial involving Defendant Colgate-Palmolive Company ("Colgate") and Johnson & Johnson in Schmitz v. Johnson & Johnson, Case No. RG18923615. I have also testified at the following trials in this Court involving cosmetic talc powder products: (i) Leavitt v. Johnson & Johnson, Case No. RG17882401; (ii) Prudencio v. Johnson & Johnson, Case No. RG20061303; and

(iii) Vanklive v. Johnson & Johnson, Case No. RG20062734.

My opinions regarding analytical methods for the identification and quantification of asbestos in cosmetic talc powder products, as well as my specific findings, have been upheld by the by the California Court of Appeal, First Appellate District, in *Leavitt v. Johnson & Johnson* (Cal. Ct. App., Aug. 5, 2021, No. A157572) 2021 WL 3418410. Moreover, one of the polarized light microscopy methodologies followed in analyzing the Cashmere Bouquet talc powder products was subject to an in-person *Kelley/Frye* hearing presided over by the coordinating asbestos judge for Los Angeles County, Judge David Cunningham, III, in *Zimmerman*, Case No. BC720153. My hourly rate deposition and trial testimony is 625.00 dollars and hour, and a copy my CV is attached to this report.

Overview

This report provides both application and JBP container calculations, for the six MDL ovarian cancer Bellwether plaintiffs. These container exposure calculations are based on J&J's own JBP application studies for both infants and adults done in primarily in the 1970's. The application calculations are based the information provided by the plaintiff's attorneys who represent the six ovarian cancer victims.

Linda Bondurant

The information about Linda Bondurant that was provided and reviewed are as follows:

- 1. 10/12/2020 Affidavit of Linda Bondurant
- 2. 03/18/2021 Deposition of Jamie Bianca Miller (Daughter of Linda Bondurant)

Linda Bondurant was born on October 2, 1959, she stated in her affidavit that she used both Johnson's Baby Powder (JBP) and Shower to Shower (STS) from approximately 1959 to 2015. Linda Bondurant stated that she applied the J&J talcum powder products, Johnson's Baby Powder 3 to 5 times a week all over body including her genital area and Johnsons' Shower to Shower everyday over her whole body. Linda Bondurant also testified that she never used any generic brand of talcum powder products.

Jamie Bianca Miller Deposition

Ms. Miller stated that her mom always used J&J Baby Powder. That she would use it in her underwear, she would open the back of her underwear by pulling the elastic away from her body, and dusting herself very liberally to the point where there would be a cloud of baby powder in the air.

Ms. Miller stated that they her mother probably only had access to J&J since they lived in a rural area until the 2000's.

Ms. Miller stated that she doesn't think that her mother used it every day, but probably more like every day in the summer, maybe a few times a week, two to three times a week.

Ms. Miller did not recall her mother ever using a product called Shower to Shower, but believed that they talked about it once, and her mother said she had used it when it first came out, that she had tried it, but that would have been before she was born.

Linda Bondurant's Talc Usage-Plaintiff Profile Form stated that she applied Shower to Shower to her genital area from approximately 1970 to 1980, and that she used it every day during that time frame.

Body Powder Application Calculations

Linda Bondurant stated that starting in 1959 until 2015 she used J&J talcum powder products. Since Linda was born in 1959, this would have required that Linda's mother had used JBP for Linda's diaper changes, and probably baths. Unfortunately, we do not have any testimony from Linda's mother about her use of JBP on Linda when she was being diapered or being bathed. Therefore, Linda's JBP application calculations will have start from 1970 for JBP and is also the date that Linda first start using Shower to Shower.

Shower to Shower Application Calculation

In the information provided, it stated that Linda used Shower to Shower (STS) every day from 1970 to 1980. In 1970, Linda would have been 12 years old. As stated, the information provided is that Linda used STS every day for this 10-year period. To be conservative, instead of 7 days week of STS usage, 6 days a week will be used for this calculation.

1970 to 1980: 10 years x 52 weeks per year x 6 days a week = **3,120 STS applications**

Shower to Shower Container Calculation

Vermont Sourced

In Linda Bondurant's affidavit she stated that she applied the STS all over her body. For whole body applications, J&J measured a range of applied talcum powder by women from approx. 4.3g, 6.2g to 8.2 g (See Table 1 at the end of this report). For this container calculation, J&J's measurement of 6.2 grams will be used.

1970 to 1980: 3,120 STS applications x 6.2 grams per application = 19,300 grams of STS

19,300 grams of STS \div 28 g/oz. = 689 oz. of STS

Assuming that a typical STS container contains 13 oz., 689 oz. ÷ 13 oz. per STS container = 53 STS 13 oz. containers

From 1970 to 1980, J&J used Vermont talc as their talcum powder. Our analysis of 23 JBP and STS historical container samples from the 1970 to 1980-time frame determined that 18 of the samples were positive (78%) for amphibole asbestos.

PageID: 260220

JBP Application Calculation

Vermont Sourced Talcum Powder

Linda Bondurant stated that she applied the J&J talcum powder products like Johnson's Baby Powder 3 to 5 times a week all over body including her genital area and Johnsons' Shower to Shower everyday over her whole body. Linda's daughter stated that her mother used JBP in her underwear almost every day during the summer and maybe 2 to 3 days a week. For this calculation, 3 times a week will be used. J&J used Vermont talc in their two body powder products from the 1970 timeframe unto 2003. Linda stated that she the JBP until 2013. From 2004 thru 2013, J&J sourced their talcum powder from China. The JBP application calculations will be broken down to reflect the number of JBP containers that Linda used when the talcum powder was sourced from Vermont and then sourced from China.

1970 to 2003: 33 years x 52 weeks per year x 3 days a week = 5,148 JBP applications

JBP Container Calculation

Vermont Sourced

Linda stated that when she applied JBP, she put it on her whole body, as well as on her genital area. Linda's daughter stated that she saw Linda put a substantial amount of JBP in here underwear. For the container calculation, the J&J measurement of 6.2 grams will be used here also.

1970 to 2003: 5,148 JBP applications x 6.2 grams/application = 32,000 grams of JBP

 $32,000 \text{ grams} \div 28 \text{ g/oz.} = 1,140 \text{ oz. of JBP}$

Assuming that a typical JBP container contains 9 oz: 1,140 oz. ÷ 9 oz. per JBP container =126 JBP 9 oz. containers

From 1970 to 2003, J&J used Vermont talc as their talcum powder. Our analysis of 3 nonhistorical and 36 JBP/STS historical container samples, and 15 historical Vermont ore samples from the 1970 to 2003 time period, determined that 75% of these two groups of samples were positive for amphibole asbestos.

JBP Application Calculation

Chinese Sourced Talcum Powder

2004 to 2015: 11 years x 52 weeks per year x 3 days a week = 1,716 JBP applications

JBP Container Calculation

Chinese Sourced

2004 to 2015: 1,716 JBP applications x 6.2 grams/application = 10,700 grams of JBP

10,700 grams \div 28 g/oz. = **380 oz. of JBP**

Assuming that a typical JBP container contains 9 oz: oz. ÷ 9 oz. per JBP container = **42 JBP 9 oz.** containers

From 2004 to 2015, J&J used Chinese talc as their talcum powder. Our analysis of 16 JBP non-historical JBP container samples from this time period, and 11 historical Chinese ore samples from the 2004 to 2014 time period, determined that 13 of these two groups of samples were positive (81%) for either amphibole asbestos and or chrysotile.

Summary of Linda Bondurant's J&J Container usage

Shower to Shower Vermont Sourced Talcum Powder: 53 STS 13 oz. containers

Johnson's Baby Powder Vermont Sourced Talcum Powder: 126 JBP 9 oz. containers

Johnson's Baby Powder Chinese Sourced Talcum Powder: 42 JBP 9 oz. containers

Total J&J Containers: 221 STS/JBP Containers

Hilary Converse

The information about Hilary Converse that was provided to me and reviewed are as follows:

- 1. 12/1/2020 Deposition of Hilary Converse
- 2. Plaintiff Profile Form

Hilary Converse was born in 1948 and stated that she started using JBP in 1962 when she was 14 years old, and stopped using it in 2017 when she was 69 years old. Mrs. Converser further stated that she only used JBP, and when she stopped using talc containing JBP in 2017, she switched to the JBP corn starch product. Also, when Mrs. Converse was using JBP with starch at some point she started using Equate which is a Walmart brand powder that also contains starch.

Mrs. Converse stated that when she had her period, she would apply the JBP to her pad, and every time she changed her pad 3 to 4 times a day. If she did not have her period, she would still use JBP on a daily basis. The information provided stated that Mrs. Converse started her periods when she was 14 years old and stopped when she was in her mid-1950s, and the average length of her periods was 5 to 7 days.

Mrs. Converse stated that her use of JBP did not change during the week or during the different seasons throughout the year. Mrs. Converse stated that she didn't know how many JBP containers a year she purchased, but probably purchased more the two JBP bottles a year, but could not say for sure.

Mrs. Converse stated that while she was breast feeding her son, she went off the pill and used a diaphragm. She stated that she followed the directions of the day, where you are supposed to wash the diaphragm off and put powder on it then put it back into the container. Mrs. Converse stated she used JBP for this too.

Mrs. Converse stated that over the years, when she was not on her period, it was pretty much daily that she would use JBP. Mrs. Converse stated she would apply to either a pad or a panty liner in her genital area and on her body.

From 1962 to 2017 when Mrs. Converse was using JBP, J&J used three sources of talcum powder. From 1962 to 1969, J&J sourced their talcum powder from the Italian mine, 1970 to 2003 their talc source was from the Vermont mines, and from 2004 until 2017, J&J sourced their talcum powder from the Chinese talc mines.

Mrs. Converse had two types of JBP exposures, the first one was during her periods that started when she was 14 years old in 1962 until she was approximately 55 years old in 2003. The second type of JBP exposure was when she did not have her periods, she would use talc containing JBP on a daily basis from 1962 until 2003.

JBP Application and Container Calculations

Italian sourced Talcum Powder

First Type of Exposure: Menstrual Cycle

Mrs. Converse stated that her menstrual periods were typically 5 to 7 days long each month, and she would use 3 to 4 pads per day. For the application calculations, a conservative 5 days a month will used and a conservative 3 pads per day.

1962 to 1969: 7 years x 12 months per year x 5 days per month x 3 pads per day = **1,260 JBP** applications.

JBP Container Calculation

Italian Sourced talcum Powder

Mrs. Converse stated that she would put the JBP on her pads during her period and would use three to four pads per day. For the JBP container calculation, it is assumed that for each pad, Mrs. Conversed applied 1 gram of JBP

1962 to **1969**: 1,260 JBP applications x 1 gram = 1,260 grams

 $1,260 \text{ grams} \div 28 \text{ g/oz.} = 45 \text{ oz. of JBP}$

Assuming that a typical JBP container contains 9 oz: 45 oz. ÷ 9 oz. per JBP container = 5 JBP 9 oz. containers

Application Calculation

Vermont sourced Talcum Powder

Menstrual Cycle

Mrs. Converse had two children a boy and a girl born sometime in the 1970s. So, for this application calculation, 2 years are subtracted from the 33-year JBP exposure period to account for when she was pregnant.

1970 to 2003: 31 years \times 12 months per year \times 5 days per month \times 3 pads per day = **5,580 JBP** applications

JBP Container Calculation

Vermont sourced Talcum Powder

1970 to 2003: 5,580 JBP applications x 1 gram of talcum powder = 5,580 grams

 $5,580 \text{ grams} \div 28 \text{ g/oz.} = 199 \text{ oz. of JBP}$

Assuming that a typical JBP container contains 9 oz: 199 oz. ÷ 9 oz. per JBP container = 22 JBP 9 oz. containers

Second type of JBP usage

Mrs. Converse testified that when she was not on her period, she would use JBP daily where she would apply the JBP on her body that included in her panty liner. Mrs. Converse stated that she did this pretty much did this on a daily basis. For this calculation, a conservative 5 days a week will be used, to account for the 5 days a month when she was on her period.

Application Calculation

Italian Sourced Talcum Powder

1962 to 1969: 7 years \times 52 weeks a year \times 5 days a week \times 1 application per day = 1,820 applications

JBP Container Calculation

Italian Sourced Talcum Powder

It is assumed that for the amount of JBP used both on her body as well as in her underwear is 6.2 grams per application (see Table 1)

1962 to 1969: 1,820 applications x 6.2 grams/application =**11,300 grams of JBP**

11,300 grams \div 28 g/oz. = 404 oz. of JBP

Assuming that a typical JBP container contains 9 oz: 404 oz. \div 9 oz. per JBP container = 44 JBP 9 oz. containers

As discussed above, from 1962 to 1969 J&J used Italian talc as their talcum powder. Our analysis of 13 JBP historical container samples during this time period, determined that 46% of these samples were positive for amphibole asbestos.

Application Calculation

Vermont Sourced Talcum Powder

1970 to 2003: 33 years x 52 weeks a year x 5 days a week x 1 application per day = **8,580** applications

JBP Container Calculation

Vermont Sourced Talcum Powder

It is assumed that for both her the amount of JBP used both on her body as well as in her underwear was 6.2 grams per application

1970 to 2003: 8,580 applications x 6.2 grams/application =53,000 grams of JBP

53,000 grams ÷ 28 g/oz. = 1,893 oz. of JBP

Assuming that a typical JBP container contains 9 oz: 1,893 oz. ÷ 9 oz. per JBP container = **210 JBP 9 oz. containers**

From 1970 to 2003, J&J used Vermont talc as their talcum powder. Our analysis of 3 non-historical and 33 JBP/STS historical container samples, and 15 historical Vermont oar samples from the 1970 to 2003 time period, determined that 75% of these two groups of samples were positive for amphibole asbestos and or chrysotile.

Application Calculation

Chinese Sourced Talcum Powder

2004 to 2018: 14 years x 52 weeks a year x 5 days a week x 1 application per day = **3,640** applications

JBP Container Calculation

Chinese Sourced Talcum Powder

It is assumed that for both her the amount of JBP used both on her body as well as in her underwear was 6.2 grams per application

2004 to 20187: 3,640 applications x 6.2 grams/application = 22,600 grams of JBP

 $22,568 \text{ grams} \div 28 \text{ g/oz.} = 806 \text{ oz. of JBP}$

Assuming that a typical JBP container contains 9 oz: 806 oz. ÷ 9 oz. per JBP container = **90 JBP 9** oz. containers

From 2004 to 2018, J&J used Chinese talc as their talcum powder. Our analysis of 25 JBP non-historical JBP container samples from this time period, and 11 historical Chinese oar samples from the 2004 to 2018 time period, determined that of these two groups of samples were positive (87%) for either amphibole asbestos and or chrysotile.

Summary of Hilary Converse's J&J Container usage

Johnson's Baby Powder Italian Sourced Talcum Powder: 5 + 44 = 49 JBP 9 oz. containers

Johnson's Baby Powder Vermont Sourced Talcum Powder: 22 + 210 = 232 JBP 9 oz. containers

Johnson's Baby Powder Chinese Sourced Talcum Powder: 90 JBP 9 oz. containers

Total JBP Containers = 371 JBP 9 oz. Containers

Anna Gallardo

The information about Anna Gallardo that was provided to me and reviewed are as follows:

- 1. 1/12/2021 Deposition of Anna Gallardo
- 2. Plaintiff Profile Form

Anna Gallardo was born in 1952 and stated that she started using JBP in 1968 when she was 16 years old, and stopped using it in 1988 when she was 36 years old. Mrs. Gallardo stated that when she stopped using JBP, she never used any other body powder on her genital area.

Mrs. Gallardo stated that the only product she ever used was JBP, and that she was pretty religious about using it every day. Mrs. Gallardo stated that she would put a few shakes of the JBP on her genital area, then put it in her hand and then pat it on her genital area, then basically use it all over on other parts of her body. Mrs. Gallardo stated that she remembers using JBP every time she took a shower. Mrs. Gallardo did not know how many JBP containers she purchased each month or each year.

JBP Application and Container Calculations

Mrs. Gallardo stated that from the time she was 16 (1968) until she was 36 years old (1988) she used JBP on a daily basis after showers. For the application calculations, a conservative 6 days a week will be used. During the time frame that Mrs. Gallardo used JBP (1968 until 1988) JBP used talcum powder that was sourced from the Vermont mines.

Application Calculation

Vermont Sourced Talcum Powder

1968 to 1988: 20 years x 52 weeks per year x 6 days a week = **6,240 JBP applications**

JBP Container Calculation

Vermont Sourced Talcum Powder

Based on Mrs. Gallardo on how she used the JBP on her genital area, then using it on the rest of her body, the amount of JBP per application for this calculation will be 8.2 grams that is based on J&J's on studies (See Table 1).

1968 to 1988: 6,240 applications x 8.2 grams/application =51,000 grams of JBP

 $51,000 \text{ grams} \div 28 \text{ g/oz.} = 1,827 \text{ oz. of JBP}$

Assuming that a typical JBP container contains 9 oz: 1,827 oz. \div 9 oz. per JBP container = **203 JBP 9 oz. containers**

From 1968 to 1988, J&J used Vermont talc as their talcum powder. Our analysis of 3 non-historical and 36 JBP/STS historical container samples, and 15 historical Vermont ore samples from the 1968 to 1988 time period, determined that 76% of these two groups of samples were positive for amphibole asbestos and or chrysotile.

Carter Judkins

The information about Carter Judkins that was provided to me and reviewed are as follows:

- 1. 12/01/2020 Deposition of Carter Judkins
- 2. Plaintiff Profile Form

Carter Judkins was born in 1956 and stated that she started using JBP in 1970 when she was 14 years old, and stopped using it in 2016 when she was 60 years old. Carter Judkins stated that she had a ridged habit of getting out of the shower and using powder that was either JBP or STS. Mrs. Judkins also stated that she would guess that she only had used one bottles worth of STS, because she didn't like as much as the JBP. Mrs. Judkins stated that during her life time, she did not use any other brands of body powder not manufactured by J&J. Mrs. Judkins stated that she used corn starch containing JBP, and would guess it was from approx. 2015 maybe into 2016. Mrs. Judkins testified that from 1970 until 2016 she used baby powder continuously during that time frame.

Mrs. Judkins testified that she after she dried herself off from her shower, she would douse one hand with JBP and slap it under her armpit, then do the same thing with the other arm pit, the do it one more time. Mrs. Judkins stated she stand with her legs apart, and slap it up into her

pubic area so that it was between her legs and on her genitals and at the top of her thighs. Mrs. Judkins stated that one "douse" consisted 3 to 4 shakes that covered the palm of her hand and it was a good healthy amount. Also, she stated that the baby powder would get on the and would get on the bathroom floor, as well as on the outside of her underwear.

JBP Application and Container Calculations

Since Mrs. Judkins testified that she only used one container of Shower to Shower between 1982 to 1983, it would be a minuscule exposure amount as compared to her use of JBP, and therefore, not incorporated into the application and container calculations. Mrs. Judkins stated that from approx. 2015 to maybe 2016, she only used corn starch containing JBP. Therefore, for both the application and container calculations, the time frame will be from 1970 thru 2014.

Mrs. Judkins stated that during the time frame that she used JBP, she would have use it daily. To be conservative for the application calculations, 6 days a week will be used instead of 7 days per week.

Application Calculation

Vermont Sourced Talcum Powder

1970 to 2003: 33 years x 52 weeks a year x 6 days a week x 1 application per day = 10,300 applications

JBP Container Calculation

Vermont Sourced Talcum Powder

Mrs. Judkins testified that she would use a total of 5 douses for one complete application. She further stated that for each "douse" consisted of 3 to 4 shakes which she defined as a healthy amount. Using 3 shakes per douse x 5 douses would equal 15 shakes of the JBP container per application. Therefore, for the JBP container calculation I will use 8.2 grams as the amount of JBP Mrs. Judkins dispensed during each application.

1970 to 2003: 10,300 applications x 8.2 grams = **84,400 grams**

84,00 grams \div 28 g/oz. = **3000 oz. of JBP**

Mrs. Judkins testified that the JBP containers were approximately 9 inches high. Assuming this estimation is correct, then for this calculation, the 15 oz. JBP container size will be used

 $3,000 \text{ oz.} \div 15 \text{ oz.}$ per JBP container = **200 JBP 15 oz. containers**

From 1970 to 2003, J&J used Vermont talc as their talcum powder. Our analysis of 3 non-historical and 36 JBP/STS historical container samples over this time period, and 15 historical Vermont ore samples, determined that 76% of these two groups of samples were positive for amphibole asbestos and or chrysotile.

Application Calculation

Chinese Sourced Talcum Powder

2004 to 2014: 10 years \times 52 weeks a year \times 6 days a week \times 1 application per day = 3,120 applications

JBP Container Calculation

Chinese Sourced Talcum Powder

It is assumed that for both her the amount of JBP used both on her body as well as in her underwear was 8.2 grams per application

2004 to 2014: 3,120 applications x 8.2 grams/application = **25,584 grams of JBP**

25,584 grams \div 28 g/oz. = **913 oz. of JBP**

Assuming that a typical JBP container contains 15 oz: 913 oz. ÷ 15 oz. per JBP container = 61 JBP 15 oz. containers

From 2004 to 2015, J&J used Chinese talc as their talcum powder. Our analysis of 20 JBP nonhistorical JBP container samples from this time period, and 11 historical Chinese ore samples, determined that of these two groups of samples were positive (81%) for either amphibole asbestos and or chrysotile.

Summary of Anne Judkins J&J Container usage

Johnson's Baby Powder Vermont Sourced Talcum Powder: 200 JBP 15 oz. containers

Johnson's Baby Powder Chinese Sourced Talcum Powder: 61 JBP 15 oz. containers

Total JBP Containers = 261 JBP 15 oz. Containers

Tamara Newsome

The information about Tamara Newsome that was provided to me and reviewed are as follows:

- 1. 12/09/2020 Deposition of Tamara Newsome
- 2. Plaintiff Profile Form

Tamara Newsome was born in 1961 and stated that she started using JBP in 1975 when she was 14 years old, and stopped using it in 2015 when she was approx. 54 years old. Mrs. Newsome stated that from 1975 to 2004, she only used JBP that contained talc. Then in 2004, Mrs.

Newsome stated that she started using corn starch containing JBP along with the talcum powder containing JBP interchangeably.

Mrs. Newsome stated that besides JBP and a few times using Shower to Shower, she did not use any other brands of body powder.

Document 33295-31

PageID: 260229

Mrs. Newsome stopped using talcum powder containing JBP when she was diagnosed with ovarian cancer in March of 2015. Mrs. Newsome stated that after surgery she did not use any type of JBP powder (talc or corn starch) on her genitals. After 2015, Mrs. Newsome stated that she still used JBP corn starch just under breast.

Mrs. Newsome testified that the use of JBP was a daily routine, she would apply the JBP under her breasts and in her underpants after her shower. Also, she stated that if she took more the one shower a day, she would use JBP again that day, but mostly it was just once a day. Mrs. Newsome stated that during her period, if she was having a light day, she would apply JBP to her pad.

Mrs. Newsome stated that she would buy at least 2 to 3 JBP containers a month, and it was the large size container that she purchased. To be conservative for this calculation the number of large JBP containers per month will be 1.5

JBP Container Calculations

Vermont Sourced Talcum Powder

1975 to 2003: 28 years x 12 months per year x 1.5 large JBP containers per month = 504 JBP 15 oz. containers

From 1975 to 2003, J&J used Vermont talc as their talcum powder. Our analysis of 3 nonhistorical and 30 JBP/STS historical container samples over this time period, and 15 historical Vermont ore samples, determined that 77% of these two groups of samples were positive for amphibole asbestos and or chrysotile.

JBP Container Calculations

Chinese Sourced Talcum Powder

Up to March of 2015, Mrs. Newsome testified that she used both talcum powder and corn starch containing JBP. She further stated that these two types of JBP was used interchangeably. For the JBP container calculations that were sourced from China, it will be assumed that each type of JBP was used 50% of the time.

2004 to 2014: 10 years x 12 months a year x 0.75 large container a month = 90 JBP 15 oz. talc Containers

From 2004 to 2014, J&J used Chinese talc as their talcum powder. Our analysis of 14 JBP nonhistorical JBP container samples from this time period, and 11 historical Chinese ore samples,

determined that of these two groups of samples were positive (84%) for either amphibole asbestos and or chrysotile.

Summary of Tamara Newsome J&J Container usage

Johnson's Baby Powder Vermont Sourced Talcum Powder: 504 JBP 15 oz. containers

Johnson's Baby Powder Chinese Sourced Talcum Powder: 90 JBP 15 oz. containers

Total JBP Containers = 594 JBP 15 oz. Containers

Pasqualini Rausa

The information about Pasqualini that was provided to me and reviewed are as follows:

- 1. 01/27/2021 Deposition of Pasqualini Rausa
- 2. 05/12/2021 Deposition of Joseph Rausa
- 3. Plaintiff Profile Form

Mrs. Rausa was born in 1955 and stated that she started using JBP soon after getting her period in 1968 when she was 13 years old, and stopped using it in 2018 when she was approx. 63 years old.

JBP

Mrs. Rausa stated that she only purchased JBP that contained talc. Mrs. Rausa stated that she would apply the baby powder after a bath or shower. Mrs. Rausa testified that she would generously apply JBP to all over her body after shaking the JBP into her hands. Mrs. Rausa stated that she would use JBP at least once a day, and if she took another bath or shower that day she would apply it again. Mrs. Rausa stated that the frequency and amount of JBP did not change over time.

<u>STS</u>

Mrs. Rausa, Mrs. Rausa could not remember when she first tried STS, but because of the smell thought it was a little too potent and powerful and didn't like it. Mrs. Rausa stated that, if she tried Shower to Shower, it wasn't very often because she found that she didn't like the scent of it. Furthermore, Mrs. Rausa doesn't have a memory of buying more than one bottle of STS, but certainly no more than 2 bottles.

JBP Applications

Mrs. Rausa stated that she would apply JBP on her chest area, underneath he breasts, and if it was hot outside, she would put some around her neck and then down below to the vaginal area.

Joseph Rausa Deposition

Mr. Rausa stated that he only saw Ms. Rausa use JBP and never saw her use any other baby powder the entire time that he knew her. Mr. Rausa stated that the first time he saw Mrs. Rausa use JBP was in approx. 1982. Mr. Rausa stated that he did see Mrs. Rausa use JBP powder in the bathroom. Mr. Rausa further stated that he saw Mrs. Rausa place the baby powder on her genital area, on her breast and also under arms. Mr. Rausa stated that Mrs. Rausa would pour the baby powder into her hand then apply it with her hand.

Mr. Rausa stated that he saw Mrs. Rausa us baby powder every time he saw her she took a shower. Mr. Rausa stated that Mrs. Rausa used the baby powder liberally, that there were airborne particles as well as some residue that had settled on the floor and in the shower base.

Mr. Rausa stated that he would see her apply the baby powder five to seven times a week.

Mr. Rausa stated that Mrs. Rausa would replace a container of baby powder once every two weeks. To be conservative, the number of JBP containers purchased per month will be 1 bottle. Also, it will ne assumed that the size of the JBP containers that used was 9 oz.

JBP Container Calculations

Vermont Sourced Talcum Powder

1968 to 2003: 35 years x 12 months per year x 1 JBP containers per month = 420 JBP 9 oz. containers

From 1968 to 2003, J&J used Vermont talc as their talcum powder. Our analysis of 3 nonhistorical and 38 JBP/STS historical container samples over this time period, and 15 historical Vermont ore samples, determined that 68% of these two groups of samples were positive for amphibole asbestos and or chrysotile.

JBP Container Calculations

Chinese Sourced Talcum Powder

2004 to 2018: 14 years x 12 months a year x 1 JBP container a month = 168 JBP 9 oz. talc Containers

From 2004 to 2018, J&J used Chinese talc as their talcum powder. Our analysis of 24 JBP nonhistorical JBP container samples from this time period, and 11 historical Chinese ore samples. determined that of these two groups of samples were positive (91%) for either amphibole asbestos and or chrysotile.

Summary of Mrs. Rausa J&J Container usage

Johnson's Baby Powder Vermont Sourced Talcum Powder: 420 JBP 9 oz. containers

Johnson's Baby Powder Chinese Sourced Talcum Powder: 168 JBP 9 oz. containers

Total JBP Containers = 688 JBP 9 oz. Containers

Conclusion

For the six ovarian cancer victims it would be my opinion a reasonable degree of scientific certainty that they would have had a substantial exposure to asbestos during the many years that they used this J&J talcum powder product.

Also, it is my opinion that there was not any evidence that these six ovarian cancer victims Bellwether Cases had any alternative exposure to asbestos-containing materials other then the J&J talcum powder products.

All of the opinions I have given in this report, I hold within a reasonable degree of scientific certainty, and I reserve the right to amend this report if new information becomes available.

Sincerely,

William E. Longo, Ph.D., CEO

Table 1

J&J Application Exposure Studies

| | | ı | | | | |
|-------------------------------------|------------------------------------|---|---|--|---|--|
| Amount of Diapers or Powder used | | | Females: 3.7 grams used From Hand: 4.4 g From container: 4.3 g From Powder puff: 2.5 g | PCM: 8 F/cc Particles: 177 to 224 P/cc | - | |
| Amount of Dispensed Powder | DA: 0.97 g WB: 2.10 g | Babies: Avg. 1.12 g Adults: Avg. 10.59 g | Males: 6.1 grams used from Hand: 7.5 g From container: 5.4 g From Powder puff: 5.1 g | Adult users 8x timer higher exposure then Babies | Males: 13 grams Females: 8.2 grams | Males: 8.4 grams Females: 6.2 grams |
| Type of Application | Diaper Area and whole Body | Babies: diaper area only Adults: whole body apply as normal | Adults: 49 females 11 males | Apply JBP in Normal Manner | Done at Motel "Used most powder" | Done at Motel Typical J&J users |
| Number of Participants and type | Newborns in Hospital 98 infants | 48 Babies < 16 months 10 Adult males 10 Adult females | 60-member in-house panel (worked for J&J) Classified as heavy users | 10 Adult Males 10 Adult Females | Adults-worked for J&J 10 Males 10 Females | Adults-not J&J workers 13 males 11 women |
| J&J and other Projects | FDA Phone Call Aug. 9, 1973 | In-Vivo Baby Powdering Study In-Vivo Adult Powdering Study | 2636.01 Baby Powder Home Usage Study | 0503.01 Evaluate Biological Response to Talc | 2636.10 JBP- General Support Study 1 | 2636.10 JBP- General Support Study 2 |
| Report Date | 1973 JNJAZ5500004513 | Date not supplied JNJ000088145 | 12-15-1976 JNJ000222459 | Dec. 1976 to Jan. 1977 | 10-18-1978 JNJ000222454 | 10-18-1978 JNJ000222454 |

Document 33295-31 PageID: 260233

| 08-28-1979 JNJC000632747 | 7300 JB Cornstarch | Babies: 29-JBP 28-JBCS 1 week of Diapering | Babies-Diapering | JBP: Avg. 2.4 g Diaper area only 0.9 g Bathing: 6.9 g* | JBP: Amount of Diapers per day: 482 ÷ 29 = 16 |
|------------------------------------|---|---|---|--|--|
| Simon Study JNJTALC00064860 | JBP Irritation Study | Group A 28 subjects Group B 30 Subjects | Babies Diapering | A: 139.82 ÷ 28 = 4.99 g B: 142.03 ÷ 30 = 4.73 g | Diaper changes A. 144.71 ÷ 28 = 5.17 B. 132.40 ÷ 30 = 4.41 |
| NIOSH July 1972 JNJ000005839 | Fiber Exposure During use of Baby Powders | Baby Doll | Baby Diapering studies & powders tested | JBP PCM Results 0.9to 2.2 f/cc | It was assumed that most infants need diaper changing 10 to 15 times per day |
| KFDA Inquiry 2009 JNJ 000391410 | JBP Dosage of baby powder | Not specified | Babies: up to 36 months old | Amount per Application Avg. 2.7 grams Range: 0.3 to 17.8 g | Applications Per Day Avg. 2.6 Range: 0.4 to 10.3 |